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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/617,098	07/14/2000	Koichi Sato	P19365	5277

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EXAMINER	
HARRIS, TIA M	

ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/617,098	SATO, KOICHI	
	Examiner	Art Unit	
	Eric D Wisdahl	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *3-9* is/are allowed.

6)☒ Claim(s) *1-2,10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings were received on 6 February 2004. These drawings are accepted.

Specification

The specification amendment was received on 6 February 2004. These specification amendments are accepted.

Response to Arguments

Applicant's arguments filed 6 February 2004 have been fully considered but they are not persuasive.

Applicant argues:

- In Okazaki, a main exposure is carried out with an optimal exposure time exclusively calculated thereof. In other words, the main exposure time is not varied based upon the pre-exposure time.

Examiner Notes:

- In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the main exposure time is varied based upon the pre-exposure time) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is seen that the language "control device performs a main exposure in which said sensitive surface of said image pick-up device is exposed at a third exposure time obtained by changing the value of one of said first exposure time and said second exposure time in accordance with a picture signal output from said image pick-up device, said picture signal being output when said image pick-up device is exposed at said second exposure time by said pre-exposure" does not read and is not suggestive on the limitations which the applicant is arguing (i.e., the main exposure time is not varied based upon the pre-exposure time).

Furthermore, such language is seen to read on the limitations as presented in that the main exposure time is calculated by changing **one of** the first or second exposure times (by changing the first, or optimal, exposure time to meet the limitations of the main exposure) **in accordance with** a picture signal output from said image pick-up device (the picture signal output, not the pre-exposure time. In other words, it is in accordance with, or in agreement with, or at the same time as, the output of the picture signal from said image-pickup device) ...

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Okazaki et al. (U.S. Patent 6, 094, 537).

Regarding Claim 1, Okazaki discloses an exposure controller of a digital camera using an image pick-up device on which an image of an object to be photographed is captured, said exposure controller comprising:

- photometering sensor (Column 4 lines 40 – 43); and
- control device, wherein:
    - said control device calculates a first exposure time in accordance with a photometering value obtained via said photometering sensor (Column 4 lines 50 – 59, Column 5 lines 59 – 67);
    - said control device performs a pre-exposure in which a sensitive surface of said image pick-up device is exposed at a second exposure time shorter than said first exposure time (Column 5 line 59 – Column 6 line 24, when an optimal exposure time is greater than $1/30^{th}$ the pre-exposure will be less than the optimal time); and
    - said control device performs a main exposure in which said sensitive surface of said image pick-up device is exposed at a third exposure time obtained by changing the value of one of said first exposure time and said second exposure time in accordance with a picture signal output from said

image pick-up device, said picture signal being output when said image pick-up device is exposed at said second exposure time by said pre-exposure (Column 6 lines 14 – 24).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki et al. (U.S. Patent 6, 094, 537) in view of Okino et al. (U.S. Patent 4, 956, 715).

Regarding Claim 2, Okazaki fails to disclose the exposure controller of a digital camera according to claim 1, wherein said digital camera is an SLR digital camera.

Okino teaches a digital camera being an SLR digital camera (Figure 1).

Such an arrangement would be beneficial in analyzing the same picture in the viewfinder or photometric sensor as that incident upon the image sensor.

Therefore, it would have been obvious to one of ordinary skill in the art to include the digital camera as an SLR digital camera so as to analyze the correct image data.

Regarding Claim 10, Okazaki discloses a digital camera comprising:

- a photometering sensor for measuring a object brightness (Column 4 lines 40 – 43);
- CCD image sensor (Figure 1 item 20);
- a control device wherein:
    - said control device calculates a first exposure time in accordance with a photometering value obtained by said photometering sensor (Column 4 lines 50 – 59, Column 5 lines 59 – 67);
    - said control device drives the image sensor at a second exposure time shorter than said first exposure time (Column 5 line 59 – Column 6 line 24, when an optimal exposure time is greater than $1/30^{th}$ the pre-exposure will be less than the optimal time); and
    - said control device subsequently drives said the image sensor at a third exposure time obtained by changing the value of one of said first exposure time and said second exposure time in accordance with a picture signal output from said CCD image sensor, said picture signal being output when said CCD image sensor is exposed at said second exposure time via said control device (Column 6 lines 14 – 24).

Okazaki fails to disclose:

- A digital camera in the form of an SLR digital camera;
- focal plane shutter positioned in front of said CCD image sensor;
- driving the focal plane shutter to effect exposure control rather than driving an image sensor to control the exposure time.

Okino teaches:

- a digital camera being an SLR digital camera (Figure 1);
- Using a focal plane shutter positioned in front of a CCD image sensor to effect exposure control (Column 2 lines 47 – 49, Column 4 line 18 – Column 6 line 20).

Such an arrangement would be beneficial in analyzing the same picture in the viewfinder or photometric sensor as that incident upon the image sensor as well as controlling the exposure time with a well-known mechanical shutter so as to block the light incident upon the image sensor.

Therefore, it would have been obvious to one of ordinary skill in the art to include the digital camera as an SLR digital camera and using a focal plane shutter positioned in front of a CCD image sensor to effect exposure control so as to analyze the correct image data which has been correctly exposed by blocking the light incident the image sensor with the focal plane shutter.

Allowable Subject Matter

Claims 3 – 9 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding Claim 3, the prior art does not disclose nor fairly suggest an exposure controller of a digital camera, comprising:

- photometering sensor; and
- control device, wherein:

- said control device *performs an exposure operation* to calculate a first exposure time in accordance with a photometering value obtained via said photometering sensor;
- said control device **calculates a second exposure time shorter than said first exposure time** in the case where said first exposure time is longer than a reference time duration;
- said control device *performs a pre-exposure* in which a sensitive surface of an image pick-up device of said **digital camera is exposed at said second exposure time to calculate a brightness value** in accordance with a picture signal which is output from said image pick-up device at said pre-exposure; and
- said control device calculates a third exposure time which is *to be used at a main exposure*, in which said sensitive surface of said image pick-up device is exposed to obtain a picture signal which is to be stored in a memory, by changing the value of one of said first exposure time and said second exposure time in accordance with said calculated brightness value.

The closest art of reference, Okino et al. (U.S. Patent 4, 956, 715), discloses the SLR digital camera with a photometering sensor (figure 2a item 23) and a control device performing an exposure operation to calculate a first exposure time in accordance with the photometering value obtained, performing a pre-exposure at a second exposure time and calculating a third exposure time to be used at a main exposure based on the calculated brightness value obtained

from the pre-exposure (Column 4 line 18 – Column 6 line 20 and Column 6 lines 43 – 44). However, Okino fails to disclose the second exposure time shorter than the first exposure time in the case where said first exposure time is longer than a reference time duration.

Furthermore, Okazaki et al. (U.S. Patent 6, 094, 537), fails to disclose a separate exposure for the photometric measurement to determine the first exposure time.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Wisdahl whose telephone number is (703) 305-4915. The examiner can normally be reached on 9:00 - 6:00 Mon-Thur every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edw

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